

European Science, Engineering and Technology Highlights¹ NOVEMBER 2014

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¹ Note: If you would like additional information or background, please feel free to contact NSFEurope@nsf.gov

1 New Interim Head at NSF Europe Office – Mark Suskin



I'm back in Paris almost exactly ten years after NSF sent me here the first time to be Head of the NSF Europe Office (2004-2007). I've now been asked to serve as Interim Head until the permanent person can be put in place. I am inserting this note to let people know I'm here and to put the Office at the disposal of anyone at NSF that can use our help. Our primary functions are representation, reporting, and liaison and our bailiwick is all of Europe. Please feel free to contact me if the Office can be of service.

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2 ICSU: Gordon McBean becomes President of the International Council for Science



At the conclusion of the organization's 31st General Assembly in Auckland, Gordon McBean assumed the presidency, to which he had been elected by representatives from ICSU's 120 National Members and 31 International Scientific Union Members at the previous General Assembly in Rome, Italy in 2011. An established member of the ICSU community, McBean succeeds the previous ICSU President, Yuan Tseh Lee, and is the second Canadian to take up this office.

Full article available at:

<http://us5.campaign-archive.com/?u=2e9b648776114e2888e7ea8c5&id=0f2d82ed9c>



3 Europe: EU research shows need for action now on climate change



The EU-funded AMPERE project has analyzed various projected scenarios on climate change and its effects on society and found that taking action sooner rather than later reduces the costs of mitigation.

Full article available at:

http://ec.europa.eu/research/infocentre/article_en.cfm?id=/research/headlines/news/article_14_11_04_en.html?infocentre&item=Infocentre&artid=33096



4 Europe must back research rhetoric with action – EUA



On 31 October the European University Association, or EUA, issued a statement expressing deep concern about cuts to research and innovation funding – including the Horizon 2020 framework – proposed by the Council of the European Union. If implemented, said the EUA, the cuts would not only jeopardize universities but also economic growth and job creation.

Full article available at:

<http://www.universityworldnews.com/article.php?story=20141031142515928>



5 Europe: More focus needed on higher education staff mobility



Staff mobility needs to be given the same kind of attention as is paid to student mobility if universities' internationalization strategies are to succeed, says a new report from the European University Association and the Academic Cooperation Association. The report, Connecting Mobility Policies and Practice: Observations and recommendations on national and institutional developments in Europe, is largely based on the results of the Mobility Policy-Practice Connect, or MPPC, project supported by the European Commission's lifelong learning program.

Full article available at:

<http://www.universityworldnews.com/article.php?story=20141030154200370>



6 Europe: Tuition fees, student grants differ widely in Europe



Levels of student tuition or administrative fees, grants and loans continue to highlight stark differences across Europe, according to a new report published by the European Commission's Eurydice network. The report, National Student Fee and Support Systems in European Higher Education 2014/2015, covers 33 European countries and reveals that fee systems have remained relatively stable across the continent, apart from some notable exceptions.

Full article available at:

<http://www.universityworldnews.com/article.php?story=20141029165122949>



7 Germany/Switzerland: The fall of the Berlin Wall revives research



The fall of the Iron Curtain on 9 November 1989 ended the separation of Eastern Europe and the Soviet Union from the West, which had lasted for decades. It was a historic moment and the beginning of a difficult process in the former communist states. An old system - the planned economy - was replaced by a new market-based economy from one day to the next. Industries suddenly had to face up to global competition. This soon led to economic breakdown in many countries of Eastern Europe. It was in this context that the Swiss parliament approved a loan to provide support for Eastern Europe. The idea soon arose of using part of the promised money to strengthen the scientific community in these beleaguered countries. The SCOPES program (Scientific Co-operation between Eastern Europe and Switzerland) was jointly launched and funded by the Swiss National Science Foundation (SNSF) and the Swiss Agency for Development and Cooperation (SDC) in 1990 (overall amount: CHF 81 million - \$84 million).

Full article available at:

<http://www.alphagalileo.org/ViewItem.aspx?ItemId=146970&CultureCode=en>



8 Germany: New funding package for universities and research



Ministers in Germany have agreed on a new funding package for higher education and research. A total of €25.3 billion (US\$32 billion) is to be provided for universities and research institutions over the next six years.

The agreement was reached in late October by the responsible ministers of the Federal government and the 16 state governments at the Gemeinsame Wissenschaftskonferenz – Joint Higher Education and Research Conference, or GWK – which convenes to discuss issues relating both to the federal and the individual state levels.

Full article available at:

<http://www.universityworldnews.com/article.php?story=20141106110419346>



9 Luxembourg: Saving lots of computing capacity with a new algorithm



The control of modern infrastructure such as intelligent power grids needs lots of computing capacity. Scientists of the Interdisciplinary Centre for Security, Reliability and Trust (SnT) at the University of Luxembourg have developed an algorithm that might revolutionize these processes. With their new software the SnT researchers are able to forego the use of considerable amounts of computing capacity, enabling what

they call micro mining. Their achievements, which the team headed by Prof. Yves Le Traon published in the International Conference on Software Engineering and Knowledge Engineering, earned the scientists a Best Paper Award during this event.

Full article available at:

http://www.eurekalert.org/pub_releases/2014-10/uol-slo102914.php



10 Norway: EU applications provide additional route to US funding



The Research Council of Norway recommends that researchers in Norway apply for funding from US federal grants as well as under Horizon 2020 to enhance transatlantic cooperation.

Researchers from North America are co-authors in close to 30 per cent of the Norwegian scientific articles produced in collaboration with international partners. But this figure could be significantly increased. The EU is also seeking to expand collaboration with the US, and Norway is therefore taking steps to promote more cooperation across the Atlantic both directly and by way of EU agencies.

Full article available at:

http://www.forskningradet.no/en/Newsarticle/EU_applications_provide_additional_route_to_US_funding/1254001570331



11 Norwegian-Chinese cooperation yields more reliable thermal readings of Arctic sea ice



Arctic sea ice has diminished significantly in recent decades, particularly in summer. Researchers from Norway and China have collaborated on developing an autonomous buoy with instruments that can more precisely measure the optical properties of Arctic sea ice while also taking measurements of ice thickness and temperature.

Photo: Sebastian Gerland og Jago Wallenschus, Norwegian Polar Institute

Full article available at:

http://www.forskningsradet.no/en/Newsarticle/NorwegianChinese_cooperation_yields_more_reliable_thermal_readings_of_Arctic_sea_ice/1254001699348



12 Norway wants to increase research cooperation with Canada



Canada and Norway share a number of strengths and have many research interests in common. Transatlantic Science Week 2014 has laid a foundation for closer cooperation, especially within Arctic research.

Photo: Ingebjørg Aadland

Full article available at:

http://www.forskningsradet.no/en/Newsarticle/Norway_wants_to_increase_research_cooperation_with_Canada/1254001898387



13 Scandinavia: Higher education 'free' as it is a public good



The five Scandinavian countries of Sweden, Denmark, Norway, Finland and Iceland have 209 higher education institutions, of which 60 are universities. Only a handful is private institutions that can charge tuition fees for local citizens. Some 1.3 million students, out of a population of 25 million, are enrolled in higher education and the majority finance their education either by partial or full student loans and grants from the governments.

Higher education is free and financial aid for students is an important part of the social welfare system.

Full article available at:

<http://www.universityworldnews.com/article.php?story=20141030132125299>

